REMARKS

Claims 4-73 are currently pending in this application.

Claims 4-73 were rejected under 35 U.S.C. 103(a) as being unpatentable over Anuff et al. (US Pat. No. 6,327,628) and Forms in HTML documents (hereafter "Forms").

Regarding Claim 4:

Claim 4 recites:

4. A customizable application system comprising:
an internet application system configured to support an internet application, the internet application associated with metadata configured for use in generating an application user interface including a user interface element, the internet application system including,
a) a user interface generator configured to generate the application user interface using the metadata, and
b) a web application server configured to deliver the application user interface to a client;
an application development system configured to generate the metadata, the metadata being further configured to characterize a user customizable immediate access keystroke combination associated with the user interface element;
a configuration system including a configuration engine and a configuration interface, the configuration interface configured to modify configuration data further characterizing the customizable immediate access keystroke combination; and
a data repository including a data record for storing the configuration data, the data record being accessible using the metadata.

With regard to Claim 4, the Examiner suggests that Anuff Col. 6 lines 35-40 teach "an application development system configured to generate the metadata" and that Col. 5 lines 53-59 teach "a configuration system including a configuration engine and a configuration interface, the configuration interface configured to modify configuration data further characterizing the customizable immediate access keystroke combination; and a data repository including a data record for storing the configuration data." The Applicants traverse these statements. The "*application development system*" and "*configuration system*" recited in Claim 4 both relate to a

feature (the "*immediate access keystroke combination*") that is user customizable. In Claim 4, the term "*user*" is used in the context of a "*user interface element*," an "*application user interface*," and "*between an internet application and a user.*" Thus, "*user*" consistently refers to a user of the "*internet application*" who accesses the "*internet application*" through the "*application user interface.*" In this context, the "*user interface element having a user customizable property*" is a "*user interface element*" customizable by a user of the "*user interface.*"

In contrast, the art cited by the Examiner relates to features "[t]o be useful to a broad range of portal providers," (Col. 5 line 49) that allow customization by a "portal provider" (Col. 5 line 64) using "an administrative GUI" (Col. 6 line 44). Examples of administrator configuration are discussed on Col. 6 lines 1-14. Thus, the teachings cited by the Examiner relate to customization by an administrator and not a "user" as recited in Claim 4. Because the party that uses the administration GUI discussed in Col. 6 line 44 of Anuff is not a user of the "*application user interface*" the customization taught in Anuff is not a "*user customizable property*" as recited in Claim 4.

Further, the Examiner admits that "Anuff fails to distinctly point out a customizable immediate access keystroke combination" and states "[h]owever, Forms teaches a customizable immediate access keystroke combination (Page 17 lines 8-15) configured by the metadata. The Applicants traverse this statement. Page 17 of Forms teaches a static method of setting an "access key" in a static HTML file. While the access key of Forms may be set by a developer, the Applicants are unable to find any indication in Forms of how, once the HTML is generated, it is customizable by a user of the application user interface as recited in Claim 4. Neither Anuff nor Forms teach how an access key could be made user customizable. Therefore, it is the

position of the Applicants that the combination of Anuff and Forms does not teach a "*user interface element having a user customizable property*" wherein that user customizable property is an "*immediate access keystroke combination*," as recited in Claim 4.

Those sections of Anuff cited by the Examiner appear to be concerned with a general layout of a static portal or the inclusion of specific modules within a static portal. The Applicants are unable to find any teaching that end users are able to customize features on the level of an "*immediate access keystroke combination*" as recited in Claim 4. While Anuff teaches a customizable layout, it is the Applicants' position that *user* customization of *low level* functionality such as a response to keystrokes it not taught by the cited art.

The Examiner states "it would have been obvious to an artisan at the time of the invention to combine the system of Anuff with the teaching of Forms." The Applicants traverse this statement. As pointed out above, there is a substantial difference between customization of a portal layout and customization of specific keystroke functionality.

First, the teachings of Anuff do not include customization of a portal's response to keystrokes entered by a user. The only items given as examples of customization features relate to what is displayed to a user. There is no indication in Anuff that the response to a user input could also be customized. Second, the teachings of Forms do not include any suggestion that an "access key" may be user customizable. All of the examples in Forms are limited to static HTML code. Thus, even in combination it is not clear how the cited art would be adapted to make the static HTML taught in Forms user customizable. The Applicants request that the Examiner specifically point out how the teachings of Anuff could be used to make the static HTML of Forms user customizable or allow Claim 4.

The Examiner states "[m]otivation to [combine Anuff and Forms] would have been to provide an excellent way to jump to common or frequently-used links." However, the Applicants are unable to find this motivation *within* a cited reference as required to complete a prima facie case under 103(a).

Further, this suggested motivation does not appear sufficient for combining the cited references. The advantage suggested by the Examiner, e.g., "providing an excellent way to jump to common or frequently-used links," is achieved by the static HTML of Forms alone and, thus, does not require combination of Anuff and Forms to be achieved. Because the suggested advantage does not require the teaching of Anuff, it does not provide a motivation to combine Anuff and Forms as suggested by the Examiner. The Applicants, therefore, request that the Examiner provide a motivation to combine, from cited art, that would motivate a person skilled in the art to combine the cited references, or allow Claim 4.

For at least the reasons discussed above the Applicants believe that Claim 4 is in condition for allowance.

Regarding Claim 5.

Claim 5 recites:

5. *An application development system for developing an internet application having an application user interface, the application development system comprising:*
   an integrated development environment configured for specifying a user interface element in the application user interface, the user interface element having a user customizable immediate access keystroke combination; and
   an application designer configured to produce metadata to characterize the customizable immediate access keystroke combination.

In rejecting Claim 5 the Examiner states "Anuff discloses ... an application designer configured to produce metadata to characterize the customizable immediate access keystroke combination (Column 7 lines 17-20)." The Applicants traverse this statement. The cited text

reads "Other types of exemplary building block modules comprise an XML inclusion module, which retrieves an XML style sheet and generates the HTML for display as the content of a module." This text appears to teach merely retrieval of preexisting XML style sheets and not generation of "*metadata to characterize*" a "*customizable*" feature that is "*user customizable*" as recited in Claim 5. The Applicants are unable to identify any teaching of "*an application designer configured to produce metadata to characterize the customizable*" feature of an interface where that feature is "*user*" customizable as recited in Claim 5.

Furthermore, as discussed above with respect to Claim 4, an ability to customize the layout of interface elements is substantially different from customization of a response to user input. The cited art does not teach how customization of layout could be extended to "*a user customizable immediate access keystroke combination*" as recited in Claim 5.

Regarding Claims 6 and 7.

It is the Applicants' position that Claims 6 and 7 are patentable for at least the same reasons discussed above with respect to Claims 4 and 5.

Regarding Claim 8.

Claim 8 recites:

8. A customizable application system for developing an application user interface associated with an internet application comprising:
an integrated development environment configured for a developer to specify a user interface element in the application user interface, the user interface element having a user customizable immediate access keystroke combination;
an application designer configured to produce metadata characterizing the user customizable immediate access keystroke combination; and
a data repository including a data record accessible using the metadata, the data record being user modifiable and being configured to store data used to further characterize the customizable immediate access keystroke combination.

In rejecting Claim 8, the Examiner states:

> Anuff discloses a customizable application system for developing an application user interface associated with an internet application comprising: an integrated development environment configured for a developer to specify a user interface element in the application user interface (Column 7 lines 5-8, 10-12), and application designer configured to produce metadata characterizing the customizable immediate access keystroke combination (Column 7 lines 17-20)...

The Applicants traverse this statement. As discussed above with regard to Claim 5, the cited text reads "Other types of exemplary building block modules comprise an XML inclusion module, which retrieves an XML style sheet and generates the HTML for display as the content of a module," and does not appear to teach that the user interface element may further be user customizable.

Regarding Claim 8, the Examiner further states, "the data record being user modifiable and being configured to store data used to further characterize the customizable immediate access keystroke combination (Column 13 lines 39-41)." The Applicants traverse this statement. The cited text reads "[i]f a user is identified as a registered user, the portal front page creates a User object as well as a Layout object, which it uses to build the User's custom front page." This text appears to teach no more than customization of interface *layout* and does not teach customization of an interface's response to user input. Further, while the cited text refers to a "User's custom front page," there is no indication that the customization may be performed by the user rather than an administrator or developer.

While the Examiner suggests that Forms teaches those limitations of Claim 8 that are not taught by Anuff, it is the position of the Applicants that Forms merely teaches how to define static hotkeys in HTML. Forms does not teach how a hotkey would be made customizable, much less *user* customizable. Specifically, Forms does not teach "*user modifiable and being configured to store data used to further characterize the customizable immediate access keystroke combination*," as recited in Claim 8. Forms also does not teach that the customization

of layout in a web portal can be extended to customization of a user's interaction with the web portal.

With regard to Claim 8 the Examiner again states that "it would have been obvious to an artisan at the time of the invention to combine the system of Anuff with the teaching of Forms Motivation to do so would have been to provide an excellent way to jump to common or frequently-used links." However, the Applicants again point out that the advantage of the combination suggested by the Examiner would be achieved by the teachings of Forms alone. Static HTML alone provides a way to jump to common or frequently-used links. Therefore, to achieve the advantage proposed by the Examiner there would be no need to combine the teachings of Anuff with those of Forms. The Applicants, therefore, request that the Examiner provide a motivation to combine from cited art, that would motivate a person skilled in the art to combine the cited references, or allow Claim 8.

Regarding Claims 9-12.

It is the Applicants' position that Claims 9-12 are patentable for at least the same reasons discussed above with respect to Claim 8 from which they depend.

Regarding Claim 13.

Claim 13 recites:

13. The customizable application system of claim 12, wherein the personalization system is integrated into the internet application.

With regard to Claim 13 the Examiner states "Anuff-Forms discloses a system, wherein the personalization system is integrated into the internet application (Anuff, Column 13 lines 25-31). The Applicants traverse this statement. The cited text states:

> Identifying information about registered site users is stored in a database. A registration page enables new users to be added to the database; a login page enables users to identify themselves to the portal server by entering their user name and password. The login

information can be stored as a browser cookie so that users don't have to log in each time they visit a site.

The Applicants are unable to identify any teaching within this text regarding an "*internet application*" or a "*personalization system*," much less a "*personalization system ... integrated into the internet application*," as recited in Claim 13. The Applicants therefore request that the Examiner more specifically point out how the above text teaches the limitations of Claim 13, or allow Claim 13.

It is further the Applicants' position that Claim 13 is patentable for at least the same reasons discussed above with respect to Claim 8 from which it depends.

Regarding Claim 14.

14. An application execution system comprising:
an internet application system configured to support an internet application, the internet application system including a query processor configured to query a data repository, the data repository including a user modifiable data record configured to store data characterizing a user customizable immediate access keystroke combination;
an application user interface including a user interface element, the application user interface configured as an interface between the internet application and a user, the user interface element including the user customizable immediate access keystroke combination, the user interface element configured for delivery to a client over a computer network; and
metadata further characterizing the customizable immediate access keystroke combination.

In rejecting Claim 14 the Examiner states "Anuff discloses ... the data repository including a user modifiable data record configure to store data (Column 13 lines 26-29, 39-41)." As discussed above, the cited text states:

> Identifying information about registered site users is stored in a database. A registration page enables new users to be added to the database; a login page enables users to identify themselves to the portal server by entering their user name and password.
>
> [and]

If a user is identified as a registered user, the portal front page creates a User object as well as a Layout object, which it uses to build the User's custom front page.

The Applicants are unable to identify any teaching within this text of "*the data repository including a user modifiable data record configured to store data characterizing a user customizable immediate access keystroke combination*," as recited in Claim 14. Specifically, the cited text, even when combined with the teachings of Forms, does not appear to teach "*a user modifiable data record*." Thus, it is the position of the Applicants that Anuff-Forms does not teach "*a user modifiable data record configured to store data characterizing a user customizable immediate access keystroke combination*," as recited in Claim 14. The Applicants therefore request that the Examiner more specifically point out how the above text teaches the limitations of Claim 14, or allow Claim 14.

The Examiner suggests the same motivation, "to provide an excellent way to jump to common or frequently-used links," for combining the cited art in Claim 14 as was suggested in previous claims. As discussed above, it is the position of the Applicants that the suggested motivation is insufficient.

Regarding Claims 15, 16 and 18.

It is the Applicants' position that Claims 15, 16 and 18 are patentable for at least the same reasons discussed above with respect to Claim 14 from which they depend.

Regarding Claim 17.

Claim 17 recites:

17. The application execution system of claim 14, further including a personalization system configured to modify the user modifiable data record.

In rejecting Claim 17 the Examiner states "Anuff-Forms discloses a system further including a personalization system configured to modify the user modifiable data record (Anuff,

Column 13 lines 26-29)." The Applicants traverse this statement. As noted above, the cited text teaches a "registration page" and a "login page." The Applicants are unable to identify any teaching within Anuff that suggests that these pages could be construed as a "*personalization system,*" much less a "*personalization system configured to modify the user modifiable data record*" where the user modifiable data record is (per Claim 14) "*configured to store data characterizing a user customizable immediate access keystroke combination.*" Neither a registration page nor a login page are suggestive of either "*a personalization system*" or "*user modifiable data record configured to store data characterizing a user customizable immediate access keystroke combination,*" as recited in Claims 14 and 17.

It is further the Applicants' position that Claim 17 is patentable for at least the same reasons discussed above with respect to Claim 14 from which it depends.

Regarding Claims 19-34.

It is the position of the Applicants that Claims 19-34 are allowable for at least the reasons discussed above with respect to Claims 4, 5, 8 and 14.

Regarding Claim 35.

Claim 35 recites:

35. A method of developing a customizable user interface element for inclusion in an application user interface, the method comprising the steps of:
developing a user interface element;
specifying a customizable property of the user interface element, the customizable property including a user customizable immediate access keystroke combination;
determining a data record for holding a value configured to characterize the user customizable immediate access keystroke combination, the data record being stored in a data repository and being user modifiable, the data repository being physically remote from a client used to display the application user interface, the application user interface being for accessing an internet application;
generating metadata further characterizing the user customizable immediate access keystroke combination, the metadata including a reference to the data record; and
storing the metadata in association with the user interface element.

In rejecting Claim 35 the Examiner states:

> Anuff discloses a method of developing a customizable user interface element for inclusion in an application user interface, the method comprising the steps of developing a user interface element; specifying a customizable property of the user interface element (Column 14 lines 3-6).

The Applicants traverse this statement. The text cited by the Examiner reads "[a] module view object contains the display logic for its module. When a user accesses the portal, each module on the front page creates an object that generates the HTML for its front-page view," (Column 14 lines 3-4). The Applicants understand this text to teach how HTML is generated for presentation to a user, but not how a "*user interface element*" is developed in the first place. Further, the Applicants are unable to identify any teaching of "*specifying a customizable property of the user interface element*" within the text cited as suggested by the Examiner.

In rejecting Claim 35 the Examiner further states "Anuff discloses ... the data record being stored in a data repository and being user modifiable (Column 13 lines 25-26, 39-41)." The Applicants traverse this statement. As pointed out above, the teachings at Column 13 lines 25-26, 39-41 of Anuff do not teach a user modifiable data record. It is, therefore, the position of the Applicants that the cited text does not teach

> *a data record for holding a value configured to characterize the user customizable immediate access keystroke combination, the data record being stored in a data repository and being user modifiable, the data repository being physically remote from a client used to display the application user interface, the application user interface being for accessing an internet application* (Emphasis added)

as recited in Claim 35.

In rejecting Claim 35 the Examiner further states "Anuff discloses ... generating metadata further characterizing (Column 14 lines 3-6)," and implies that this teaches "*generating metadata further characterizing the user customizable immediate access keystroke combination,*

the metadata including a reference to the data record," as recited in Claim 35. The Applicants traverse this statement. The text of Anuff cited by the Examiner is the same text that the Examiner suggests teaches "specifying a customizable property of the user interface element." The Applicants are unable to see either, much less both of theses teachings within the cited art. Claim 35 includes both "*generating metadata further characterizing the user customizable immediate access keystroke combination, the metadata including a reference to the data record,*" and "*specifying a customizable property of the user interface element, the customizable property including a user customizable immediate access keystroke combination.*" Assuming, for the sake of argument, that the HTML generation taught in the cited text implies "*generating metadata further characterizing the user customizable immediate access keystroke combination,*" the Applicants fail to see how it also teaches "*specifying a customizable property of the user interface element.*" The Applicants, therefore, request that the Examiner more specifically point out these teachings within the cited art or allow Claim 35.

The Applicants further believe that Claim 35 is allowable for at least the reasons discussed in respect to Claims 4, 5, 8 and 14. As in Claims 4, 5, 8 and 14, the Examiner suggests "to provide an excellent way to jump to common or frequently-used links" as motivation to combine the cited references.

Regarding Claims 36-38.

It is the position of the Applicants that Claims 36-39 are allowable for at least the reasons discussed above with respect to Claim 35 from which they depend.

Regarding Claim 39.

Claim 39 recites:

39. A method of generating a customizable application user interface, the method comprising the steps of:

accessing a page definition, the page definition including metadata for characterizing a user customizable immediate access keystroke combination;
accessing a data record using the metadata, the data record being stored in a data repository and being user modifiable, the data repository being physically remote from a client used to display the user customizable application user interface;
determining a value characterizing the user customizable immediate access keystroke combination using information stored in the data record;
generating markup-language responsive to the determined value; and
including the generated markup-language in an application user interface.

In rejecting Claim 39, the Examiner states "Anuff discloses ... determining a value for characterizing using information stored in the data record; generating markup-language responsive to the determined value (Column 14 lines 3-6)." The Applicants traverse this statement. The cited text reads "[a] module view object contains the display logic for its module. When a user accesses the portal, each module on the front page creates an object that generates the HTML for its front-page view." While this text teaches generation of HTML, the Applicants are unable to identify any indication of "*determining a value characterizing the user customizable immediate access keystroke combination using information stored in the data record*" as recited in Claim 39. For example, the Applicants are unable to identify, within the cited text, the "*information stored*" and how it is used to determine "*a value characterizing ....*" The Applicants, therefore, respectfully request that the Examiner more particularly point out how the cite text teaches the limitations suggested by the Examiner. Particularly wherein the "*data record*" is "*user modifiable,*" and includes "*information*" used in "*determining a value.*"

The Applicants further believe that Claim 39 is allowable for at least the reasons discussed in respect to Claims 4, 5, 8, 14 and 35. As in Claims 4, 5, 8, 14 and 35 the Examiner suggests that "to provide an excellent way to jump to common or frequently-used links" is motivation to combine the cited references.

Regarding Claims 40-43.

It is the position of the Applicants that Claims 40-43 are allowable for at least the reasons discussed above with respect to Claim 39 from which they depend.

Regarding Claims 44-60.

It is the position of the Applicants that Claims 44-52 are allowable for at least the reasons discussed above with respect to Claims 4, 5, 8, 14, 35 and 39.

Regarding Claim 61.

Claim 61 recites:

61. The method of claim 56, wherein the step of retrieving a value is responsive to inclusion of the application user interface in an application component.

In rejecting Claim 61, the Examiner states "Anuff-Forms discloses a method, wherein the step of retrieving a value is responsive to inclusion of the application user interface in an application component (Column 14 lines 3-6)." The Applicants traverse this statement. The text cited by the Examiner reads "[a] module view object contains the display logic for its module. When a user accesses the portal, each module on the front page creates an object that generates the HTML for its front-page view," (Column 14 lines 3-4). Claim 61 includes the limitations that "*retrieving a value*" is responsive to whether or not "*the application user interface*" is included in an "*application component.*" The Applicants are unable to identify any discussion of an "*application component*" in the cited text, much less wherein "*retrieving a value*" "*is responsive*" to the application interface being in this "*application component.*" The Applicant, therefore, requests that the Examiner more specifically point out teachings of the limitations of Claim 61 within the cited text, or allow Claim 61.

It is further the Applicants' position that Claim 61 is patentable for at least the same reasons discussed above with respect to Claim 56 from which it depends.

Regarding Claims 62-73.

It is the position of the Applicants that Claims 62-73 are allowable for at least the reasons discussed above with respect to Claims 4, 5, 8, 14, 35 and 39.

The Applicants believe that all pending claims are allowable and respectfully request that the Examiner issue a Notice of Allowance. Should the Examiner have questions, the Applicants' undersigned representative may be reached at the number provided below.

Respectfully submitted,

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By: _____

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